

Sexually transmitted diseases

Extract from the Annual Report of the Chief Medical Officer of the Department of Health and Social Security for the year 1972

Since the middle 1950s, with only occasional pauses, the number of cases of gonorrhoea reported from the clinics has progressively increased and the number of cases of syphilis has not been materially reduced. We may now have more complete information about the frequency of infection than we have had at any time in the past and that may partly explain why the figures for gonorrhoea for 1971 were higher than they had been for 40 years. Both these diseases are readily treatable and it should now be possible to reduce the risk of infection with either disease more certainly and quickly than in the 1930s. The only rational explanation for the failure of improved treatment to control the incidence of these diseases is that the risk of acquiring infection is being taken far more frequently. Syphilis and gonorrhoea are spread by sexual intercourse in virtually all cases except for a very few prenatal and prepubertal infections. In stable marital relationships or stable relations between couples outside marriage the risk of infection is negligible. It is promiscuity which is the principal threat. Control of the spread of such infections can be achieved in only two ways: the rejection of promiscuity by a society which recognizes this among the other hazards of such relationships; or by the tracing and treatment of the sexual partners of any patient with a new infection. In the People's Republic of China it is believed that the first of these methods has been generally adopted. One is assured by responsible Chinese clinicians that primary syphilis, which was once common, is now hardly ever seen and that the incidence of gonorrhoea has been greatly reduced. If our society were to accept that pattern of behaviour, syphilis and gonorrhoea could be quickly reduced to trifling proportions. Manifestly, the National Health Service cannot bring about that change in sexual mores by its own efforts and must use the second method which is open to it. Last year the adoption of intensified contact action was re-

ported. The full effect of this action became apparent in 1972, when there was a reduction in post-pubertal gonococcal infections in males of approximately 8 per cent. The number of cases in women increased by about 2 per cent., but infection in women is less apparent than in men and the process of contact tracing may be expected to make the detection of cases in females more complete.

This modest improvement indicates no more than a hopeful beginning. The incidence of syphilis was marginally greater than in the preceding year and, perhaps more significantly, the incidence of non-specific genital infection, which is now much more common than gonorrhoea, and for which there is no specific treatment, actually increased by some 5 per cent; but here again the proportionate increase was greater in women and it may be that contact tracing will help in the control of this infection also.

The worst feature is the frequency of infection among the really young. It is not surprising that infection should occur most commonly in age groups in which the unmarried form the largest proportion and therefore that the incidence in females should be highest before the age of 20 years. Almost a fifth of all gonorrhoea and a third of gonorrhoea in females occurs before the age of 20. There was a slight reduction in the number of boys found infected as compared with 1971 but in girls there was an increase slightly greater than the reduction in boys. There were small increases in both boys and girls under 16. It is probable that ignorance among the young is still an important factor in the spread of these infections in the younger age groups and the work of the Health Education Council and of the schools should be directed to removing this ignorance through a better understanding of sexual relationships generally. Meanwhile the Health Service must address itself intensively to the measures which will improve control of these now unhappily all too common communicable diseases. The National Health Service can help, but it cannot direct or initiate the essentially educational activities which are needed for younger people.

The year 1972 has seen a further consolidation of the services for the sexually transmitted diseases (STD). Some old clinics with inadequate space have been replaced by larger purpose-built departments, and in other clinics alterations and extensions have improved working facilities. There have been increases in medical, nursing, and ancillary staff, which has helped in the reception and care of patients, who continue to attend the clinics in increasing numbers. Of the diseases traditionally described as venereal, chancroid remains a rarity and syphilis remains at a low level and still does not increase significantly. Gonorrhoea control remains a major problem, but there was a slight fall in the total case numbers during the year, and this may have been due to the intensification of contact tracing organized by physicians in charge of clinics with the help of staff of Local Health Authorities.

Other sexually transmitted diseases still comprise the major case-load in the clinics. Progress has been made in research on the aetiology of non-specific genital infections which are still on the increase; facilities for isolating *Chlamydia* are now available in at least three main centres, and research on the role of mycoplasmas is also continuing. Figures of other STDs are now available for two successive years, so that the number of cases attending clinics per 100,000 of population in 1972 can be compared with those of the previous year.

The efficiency of the treatment services is probably the main reason why our figures are rather less unfavourable than those of some other countries, such as the United States and Canada, where rates for syphilis and gonorrhoea have in general been higher. The rates for early infectious syphilis in 1971 in the United Kingdom, Canada, and the USA were approximately 2.5, 2.6, and 11.5 per 100,000 population and for gonorrhoea 121, 158, and 307 per 100,000 population respectively.

Syphilis

The definition of early syphilis includes the primary, secondary, and early latent stages. In 1972 there were 1,647 cases—1,350 in males (a small increase over 1971) and 297 in females (slightly less than in 1971), giving a combined incidence of 3.56 per 100,000 population as compared with 3.48 in 1971 (Table I). The male:female ratio in 1972 was 4.5:1 as compared with 3.8:1 in 1971. If the latent cases are excluded, then the total of early infectious syphilis for 1972 was 1,187 cases—1,005 in men and 182 in women, giving a combined incidence of 2.56 per 100,000 population as compared with 2.46 in 1971. The male:female ratio in 1972 was 5.5:1 as compared

with 4.4:1 in 1971. It will be seen that the 1972 figures show a slight overall increase over those of the previous year, with an increase in the male:female ratio.

Information was obtained from the clinics on the numbers of these cases of early infectious syphilis believed to have been contracted (a) in the United Kingdom and (b) abroad. The totals were: contracted in the UK 940 (79.2 per cent.), contracted abroad 192 (16.2 per cent.), not known 55 (4.6 per cent.). In 1971, 17.8 per cent. of infections were contracted abroad.

The age breakdown for cases of early infectious syphilis per 100,000 population is also shown in Table I. The distribution is similar to that of previous years, with the highest incidence in the 20 to 24-year age group (both sexes) at 8.49 as compared with 8.75 in 1971. In females, however, the incidence is highest in the 18 to 19-year age group; this was also the case in 1970 and 1971. This age distribution is not surprising in a disease which is related to sexual promiscuity, since steady marital relationship greatly reduces exposure to risk and the average age of women at marriage is less than that of men.

During 1972 it was possible to take action regarding 1,175 contacts of cases of syphilis, of which 928 derived from male patients. As a result 506 male contacts were examined and 193 were found to have syphilis; 466 female contacts were examined and 97 were found to have syphilis.

Cases of late syphilis (all forms) declined from 1,217 in 1971 to 1,159 in 1972, giving an incidence of 2.50 per 100,000 population. In 1972 there were 84 cases of cardiovascular syphilis (62 in men and 22 in women) as compared with 99 in 1971. The 1972 figures for neurosyphilis were 155 (104 in men and 51 in women), as compared with 129 in 1971. There were 920 cases at all other late and latent stages, 599 men and 321 women. Unpublished figures for 1972 (Office of Population Censuses and Surveys) recorded deaths in five men and four women with general paralysis of the insane, in nine men and three women with tabes dorsalis, and in eighteen men and nineteen women with syphilitic aortic aneurysm.

The number of new cases of treponemal diseases presumed to be non-syphilitic showed a small increase. In 1972 there were 853 cases reported from the clinics, giving an incidence of 1.84 per 100,000 population as compared with 1.78 in 1971 (Table II), when the number was 821.

The incidence of congenital syphilis decreased. The figure for all congenital infections was 159 as compared with 201 in 1970, an incidence of 0.34 per 100,000 population as compared with 0.44 in 1971 (Table I). There were fifteen infections in children under the age of 2 years. This is a low incidence but

TABLE I *The venereal diseases—new cases per 100,000 population, by age, seen at hospital clinics in England, 1968–72*

Year	1968			1969			1970			1971			1972		
Sex	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Early syphilis	6.25	1.57	3.84	5.86	1.28	3.51	5.82	1.11	3.42	5.67	1.42	3.48	6.00	1.25	3.56
All ages															
Early syphilis (primary and secondary only,															
All ages	4.65	0.95	2.75	4.43	0.87	2.60	4.21	0.77	2.42	4.11	0.89	2.46	4.46	0.77	2.56
Under 16	0.05	0.02	0.04	0.03	0.05	0.04	0.03	0.03	0.03	0.05	0.07	0.06	0.02	0.12	0.07
16 and 17	2.35	2.61	2.48	3.00	3.29	3.14	2.21	1.63	1.92	2.64	1.80	2.23	3.84	1.45	2.67
18 and 19	7.63	4.48	6.07	9.37	6.19	7.79	5.98	4.32	5.16	7.97	5.17	6.59	7.47	4.32	5.93
20–24	15.08	3.79	9.46	14.35	3.22	8.82	13.51	3.69	8.62	13.80	3.64	8.75	13.09	3.83	8.49
25 and over	5.24	0.74	2.86	4.87	0.56	2.59	4.74	0.53	2.51	4.53	0.67	2.49	5.24	0.49	2.73
Late syphilis															
All ages	4.24	2.83	3.52	3.75	2.45	3.08	4.00	2.07	3.01	3.79	1.55	2.64	3.40	1.66	2.50
Congenital syphilis															
All ages	0.42	0.61	0.52	0.38	0.61	0.50	0.32	0.45	0.39	0.38	0.49	0.44	0.29	0.40	0.34
Gonorrhoea (post-pubertal)															
All ages	142.70	50.94	95.56	158.34	60.84	108.26	164.31	69.69	115.72	169.26	5.907	121.26	155.64	77.10	115.28
Under 16	1.25	4.19	2.69	1.36	6.22	3.73	1.35	7.01	4.11	2.15	7.03	4.53	1.81	7.36	4.52
16 and 17	105.32	193.92	148.72	131.11	248.64	188.64	143.23	316.00	228.13	161.37	348.62	252.47	144.61	362.92	251.24
18 and 19	359.99	315.22	337.82	466.05	412.36	439.31	503.69	508.25	505.95	523.91	558.80	541.06	487.50	575.43	530.40
20–24	572.60	248.22	411.11	625.86	290.25	458.98	643.41	331.95	488.53	683.29	370.08	527.46	675.71	393.06	535.40
25 and over	138.49	27.66	79.95	151.23	31.49	88.00	156.75	33.94	91.91	159.26	36.58	94.30	143.15	36.26	86.61
Chancroid															
All ages	0.22	0.01	0.11	0.24	0.01	0.12	0.20	0.01	0.10	0.22	0.02	0.12	0.21	0.01	0.11

TABLE II *Other sexually transmitted diseases and other conditions—new cases per 100,000 population at all ages and by sex seen at hospital clinics in England, 1968–72*

Year	1968			1969			1970			1971			1972		
Sex	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Lymphogranuloma venereum	0.24	0.01	0.12	0.13	0.02	0.07	0.18	—	0.08	0.20	0.01	0.10	0.24	0.02	0.13
Granuloma inguinale	0.04	—	0.02	0.01	—	0.01	0.03	—	0.01	0.02	—	0.01	0.01	0.01	0.01
Non-specific genital infection	155.78	—	—	178.20	—	—	204.79	—	—	263.55	56.54	157.13	277.65	60.61	166.13
with arthritis	1.32	—	—	1.61	—	—	1.65	—	—	1.88	0.13	0.98	1.99	0.10	1.02
Trichomoniasis	—	—	—	—	—	—	5.73	61.00	34.12	5.80	73.46	40.59	6.82	73.38	41.02
Candidiasis	—	—	—	—	—	—	—	—	—	12.86	90.90	52.98	19.34	107.16	64.46
Scabies	—	—	—	—	—	—	—	—	—	11.29	3.10	7.08	9.93	2.25	5.99
Pubic lice (pediculosis pubis)	—	—	—	—	—	—	—	—	—	13.71	4.15	8.80	13.45	4.50	8.85
Herpes simplex	—	—	—	—	—	—	—	—	—	12.22	3.95	7.96	13.84	5.31	9.46
Warts (condylomata acuminata)	—	—	—	—	—	—	—	—	—	39.81	20.32	29.79	45.54	23.42	34.17
Molluscum contagiosum	—	—	—	—	—	—	—	—	—	1.66	0.60	1.12	2.03	0.74	1.37
Other treponemal diseases	2.31	1.86	2.08	2.20	1.45	1.82	2.28	1.38	1.81	2.42	1.18	1.78	2.55	1.17	1.84
Other conditions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Requiring treatment	—	—	—	—	—	—	—	—	—	93.44	36.09	63.96	101.85	39.32	69.72
Not requiring treatment	140.05	71.86	105.02	162.67	85.58	123.08	167.37	89.70	127.48	199.66	103.59	150.27	208.90	110.19	158.18

blood is taken for other tests in pregnancy and a test for syphilis is still justified as a routine in antenatal care.

The number of tests giving a positive result found in five regional centres (Table III) remains very low, but 52 pregnant women from these centres were found positive (87 in 1971).

Gonorrhoea

For the first time in a decade there was a fall (4.6 per cent.) in the total number of new cases, with 53,439 as compared with 55,988 in 1971, but this occurred only in males. There were 35,051 new cases in males (7.6 per cent. fewer than in 1971) and 18,388 in females (1.9 per cent. more than in 1971). The post-pubertal figures were 35,033 in men and 18,341 in women; the incidence per 100,000 population was 115.28 overall—155.64 in men and 77.10 in women, as compared with 121.26, 169.26 and 75.90 respectively in 1971 (Table I). The male:female case ratio was 1.9:1; in 1971 it was 2.1:1. The prepubertal cases numbered 65: 31 of vulvovaginitis, three of urethritis, and 31 of gonococcal ophthalmia; the figures for 1971 were 45 of vulvovaginitis and 53 of ophthalmia.

Information obtained from the clinics of the age breakdown in cases of gonorrhoea per 100,000 of population (Table I) showed an incidence of 535.40 in the 20 to 24-year age group, 530.40 in the 18 and 19-year age group, 251.24 in the 16 and 17-year age group, and 4.52 under 16 years, as compared with 86.61 in the over 25-year age group. The rates for 1971 were 527.46, 541.06, 252.47, 4.53, and 94.30 respectively.

Infections in persons under 16 years of age occurred in 109 boys and 420 girls in 1972 compared with 129 boys and 400 girls in 1971. The incidence of new cases per 100,000 population was only 1.81 in boys as compared with 7.36 in girls in this age group (Table I). The number of cases in boys aged 16 to 19 was 4,141, as compared with 4,393 in 1971, and the number in girls of that age 5,854 as compared with

5,588 in 1971. The incidence of new cases per 100,000 population (Table I) for boys was 144.61 for the 16 and 17-year age group and 487.50 for the 18 and 19-year age group. For girls it was 362.92 for the 16 and 17-year age group and 575.43 in the 18 and 19-year age group.

Information was obtained from the clinics on the numbers of post-pubertal cases of gonorrhoea believed to have been contracted abroad. In 1972 the figure was 1,862, 3.5 per cent. out of the total of 53,374; in 1971 the equivalent percentage was 3.6 per cent.

During 1972 action proved possible regarding 33,359 contacts of cases of gonorrhoea, of which 25,457 derived from male patients. As a result 18,776 contacts attended a clinic—6,375 men and 12,401 women. On examination 13,003 of these were found to have gonorrhoea—3,852 men and 9,151 women.

Chancroid

This disease remains a minor problem in England. There were 49 new cases reported in 1972, compared with 55 in 1971. This gives an incidence of 0.11 per 100,000 population as compared with 0.12 in 1971 (Table I).

Other sexually transmitted diseases

Lymphogranuloma venereum and granuloma inguinale

These diseases continue to be rare in England. In 1972 there were 59 cases of lymphogranuloma venereum as compared with 46 in 1971. The incidence per 100,000 population was 0.13. There were five new cases of granuloma inguinale (5 in 1971). The incidence was 0.01 per 100,000 population (Table II).

Non-specific genital infection

Research on the causative agent or agents of this group continues to be supported by the Department. In 1972 there was a total of 76,916 cases—62,498 in men and 14,418 in women; the 1971 figures were

TABLE III *Syphilis tests in pregnancy, 1972*

Centre	No. of antenatal patients			Positive syphilis tests				
	Primiparae	Multiparae	Parity not known	Primiparae		Multiparae		Parity not known
				No.	Per cent.	No.	Per cent.	
Cambridge	11,971	12,285	814	8	0.067	10	0.081	0
Leeds	10,580	6,551	1,734	1	0.009	12	0.183	0
Liverpool	21,639	24,282	—	1	0.005	2	0.008	—
Oxford	4,768	7,252	1,013	1	0.021	0	—	0
Sheffield	22,168	12,366	—	5	0.023	12	0.097	—

72,240, 59,023, and 13,397 respectively. In 1972 the incidence was 166.13 per 100,000 population—277.65 in men and 60.61 in women; the 1971 rates were 157.13, 263.55, and 56.54 respectively (Table II). There were 447 cases of non-specific urethritis with arthritis in males and 23 cases in females in 1972, compared with 420 cases in males and 30 cases in females in 1971. In the absence of specific diagnostic tests outside the research field, therapy remains empirical and the possibilities of control are therefore less than in other sexually transmitted diseases.

Trichomoniasis

There were 1,535 male cases and 17,456 female cases reported from the clinics in 1972; the figures for 1971 were 1,300 and 17,407 respectively. Rates per 100,000 population are given in Table II.

Candidiasis

There were 4,353 male cases and 25,491 female cases in 1972, a total of 29,844 cases; for 1971 the equivalent figures were 2,881, 21, 539, and 24,420. (For incidence rates, see Table II).

Scabies and pediculosis pubis

In 1972, 2,771 cases of scabies were reported from the clinics (2,235 in men and 536 in women), as compared with the 1971 figures of 3,262, 2,528, and 734. There were 4,099 cases of pediculosis pubis (3,028 in men and 1,071 in women), as compared with the 1971 figures of 4,054, 3,070, and 984. (For incidence rates see Table II.)

Genital herpes, genital warts, and genital molluscum

There were 4,380 cases of genital herpes recorded at the clinics in 1972—3,116 in men and 1,264 in women (in 1971 the figures were 3,671, 2,736, and 935); 15,820 cases of genital warts—10,250 in men and 5,570 in women (in 1971 the figures were 13,370, 8,916, and 4,814); and 634 cases of genital molluscum—457 in men and 177 in women (in 1971 the figures were 514, 371, and 143). (For incidence rates, see Table II.)

Other conditions

The total in 1972 of other conditions requiring treatment was 32,280—22,927 cases in men and 9,353 cases in women. The incidence was 69.72 per 100,000 population (101.85 men and 39.32 in women), the comparable rates for 1971 being 63.96, 93.44, and 36.09 respectively.

Cases included under the heading 'conditions requiring no treatment at the clinic' numbered 73,234 (47,023 males and 26,211 females).

The present position

The survey of clinics in England carried out by the Department in 1971 revealed considerable planned rebuilding and upgrading. This year large purpose-built clinics opened at St. Mary's Hospital, London (James, Jefferiss, and Willcox, 1973), and in Sheffield, reflect this policy; two new clinics at hospitals in the North-West Metropolitan Region will be capable of expansion and will help to cope with the case load in this region which is by far the heaviest in the country. Further enquiries by the Department concerning the sixteen clinics reported last year as 'inadequate but with no plans for improvement' have resulted in action being promised by the authorities concerned. The DHSS has sought advice from representatives of the Medical Society for the Study of Venereal Diseases on detailed planning of clinics in district general hospitals, and both new and out-dated clinics have been visited by a working party which is to prepare a design guide on the subject. Between October, 1970, and August, 1972, seven of nine consultant posts and seven of eight senior registrar posts were filled (Department of Health and Social Security, 1972b). Career prospects in this subject are good for junior staff, offering suitable doctors opportunities for relatively early promotion to consultant grade (Department of Health and Social Security, 1972a). The chances of increasing the number of consultants in the next few years have been improved by further appointments at senior registrar level during the year. In addition the Department has approved a number of supplementary registrar posts, some with sessions in departments of general medicine to help young doctors training for higher qualifications. The diagnosis of STD in the clinics depends more and more on effective laboratory support both at the local level and from the main reference laboratories, and this adds to the potential of research. The first monograph of the Public Health Laboratory Service deals with the diagnosis of venereal diseases (Wilkinson, 1972).

During the year the Joint Board of Clinical Nursing Studies completed its syllabus for a 24-week post-certificate course to prepare registered and enrolled nurses to work in clinics for the sexually transmitted diseases. This was published in December, and early in 1973 the Joint Board approved courses to be held at centres in Sheffield and London. This is timely, as a survey of nurses in post this year indicated that 44 per cent. were over the age of 50.

Research into various aspects of the sexually transmitted diseases has been promoted both by the Medical Research Council and by the Department. The studies include typing, serology, and sensitivity

testing in chlamydial infections. The Department has provided travel facilities for individual members (medical, nursing, and ancillary) of clinic staffs to give them experience in research centres abroad. In addition, two consultants from the United Kingdom were assisted to attend a five-week travelling seminar in the USA in October, 1971, organized by the World Health Organization and the International Union against the Venereal Diseases and the Treponematoses, in conjunction with the US Public Health Service. The findings of the seminar comment on the lack of centres staffed by trained clinicians in the subject in the USA in spite of excellent research facilities, particularly at the Centre for Disease Control in Atlanta, Georgia. This may be one reason why private physicians treat over 80 per cent. of the cases of syphilis and gonorrhoea in the USA.

With the aid of special funds made available by the DHSS, the Health Education Council organized an intensive pilot campaign in two London Boroughs (Lambeth and Wandsworth). This campaign, which started in November, 1972, is particularly aimed at the control of gonorrhoea by a variety of educational techniques. These would encourage people to co-operate in the control of this disease by attending clinics for medical examination and supplying information to aid in the tracing of potentially infected contacts. It is hoped to achieve this by concentrating on the younger age group mainly involved and on the areas of the boroughs from which most infected patients come, using displays and the showing of a special film loop. These techniques are supported by a concerted effort in the main clinic serving the two Boroughs (Lydia Clinic, St. Thomas' Hospital) to improve contact tracing efficiency and technique. For this purpose three Research Officers were appointed to work under the guidance of the Research Division of the Health Education Council to aid in retrospective and prospective studies. It is hoped to extend these activities to include all other clinics in the Greater London Council area which also deal with infected patients from the two Boroughs.

Apart from the special HEC project, facilities and staffing for the purpose of contact action have shown a marked improvement in the GLC area where about 50 per cent. of the reported infections in England occur. The recommendations of the 1971 DHSS conference have for the greater part been implemented, so that, through the close co-operation of physicians in charge of clinics and MOsH of the London Boroughs, nearly every clinic has a welfare officer for contact tracing purposes supplied with a room for interviewing patients. The provisional list of welfare officers in the clinics and designated health

visitors has been circulated. The intention is to extend the 1971 recommendations and list to the rest of England, although it should be noted that the standards of contact action are already at a high level in a number of the main provincial centres. The further shift in the ratio of male to female cases of gonorrhoea, together with the small overall fall in the figures (see p. 76), may indicate the beginning of more effective control.

The role of the general practitioner in STD control is important, and figures obtained by the HEC from over 400 doctors in the Boroughs of Lambeth and Wandsworth reveal that about 95 per cent. send the majority of their male patients suspected of having gonorrhoea to a clinic, while not more than 5 per cent. arrange treatment themselves. Even so, diagnostic kits were sent to all these doctors, to be returned to the clinics when indicated, so that an accurate laboratory diagnosis might be made. To the end of this year, a period of 2 months, no case of gonorrhoea has been reported as a result of this procedure. This indicates that, in areas where an efficient clinic service is available, the majority of males with gonorrhoea go of their own accord to the clinic or are referred there. This conclusion would suggest, therefore, that the majority of the female contacts, who may be symptomless, can also be brought to the clinic by contact action after infection of males has occurred. If this is so, then the screening of women in antenatal clinics, gynaecological outpatient departments, and family planning clinics will discover only a further very small percentage of cases of gonorrhoea. Preliminary reports from several pilot studies to date seem to confirm this expectation. The position is in sharp contrast to that in the United States where the majority of patients with gonorrhoea are still treated by private physicians.

During the last year England has been represented on a Working Party of the Public Health Committee of the Council of Europe, where a scheme by which each member nation could improve the organization of its own STD services is under consideration; final recommendations will be submitted at the end of 1973. The meeting on international contact tracing in Europe mentioned last year produced a most useful and informative report which WHO has published (WHO, Regional Office for Europe). This report emphasizes the need for national STD services to be established before control can be achieved in Europe. In this area the movement of populations relating both to tourism and to migrant labour between the various countries is very large and likely to increase further in England in the future following our entry into the European Economic Community.

References

- DEPARTMENT OF HEALTH AND SOCIAL SECURITY. Hospital Medical Staffing Section (1972a) *Health Trends*, **4**, 30.
- (1972b) *Ibid.*, **4**, 68.
- JAMES, D. T., JEFFERISS, F. J. G. and WILLCOX, R. R. (1973) 'The Praed Street Clinic (St. Mary's Hospital), London., Information documents WHO/VDT/73.385 and WHO/VDT/RES/73.291. World Health Organization, Geneva.
- OFFICE OF POPULATION CENSUSES AND SURVEYS. 'The Registrar General's Statistical Review of England and Wales for the Year 1972.' Not yet published.
- WILKINSON, A. E., TAYLOR, C. E. D., MCSWIGGAN, D. A., TURNER, G. C., RYCROFT, J. A. and LOWE, G. H. (1972) 'Laboratory Diagnosis of Venereal Disease'. (Public Health Laboratory Service Monograph Series No. 1) HMSO, London.
- WORLD HEALTH ORGANIZATION, REGIONAL OFFICE FOR EUROPE (1972) 'The Inter-country Spread of Venereal Diseases: Report on a Working Group, Copenhagen, 1971' (EURO 1101). Regional Office for Europe, World Health Organization, Copenhagen.